

Claims

- 1 1. A test device comprising:
2 an element having a surface for contacting a first plane; and
3 a probe having a free end positioned in a second plane.

- 1 2. The test device of claim 1 wherein the element having the surface to
2 contact the first plane includes features for contacting a ground plane.

- 1 3. The test device of claim 1 wherein the length of the probe is greater than
2 the length of the element having a surface for contacting the first plane.

- 1 4. The test device of claim 1 wherein the element shields the probe.

- 1 5. The test device of claim 1 wherein the element surrounds the probe to
2 shield the probe.

- 1 6. The test device of claim 1 wherein the element that shields the probe
2 further comprises features for contacting a ground plane dimensioned to prevent
3 interference from radio signals of a selected frequency.

- 1 7. The test device of claim 6 wherein the features for contacting a ground
2 plane include a plurality of pointed peaks separated by valleys wherein the height of
3 the peaks are dimensioned to prevent passage of radio signals of a selected
4 frequency.

- 1 8. The test device of claim 7 wherein the element includes a cylindrical
2 portion surrounding a portion of the probe.

1 9. An electronic package comprising:
2 a printed circuit board further including:
3 a primary side; and
4 a secondary side;
5 a component having a main body, the component attached to the primary
6 side of the printed circuit board and further including a pad attached to the main
7 body of the component, the pad positioned between the main body of the component
8 and the primary side of the printed circuit board;
9 a ground plane connection surface attached to the secondary side of the
10 printed circuit board, the printed circuit board having an opening therein positioned
11 near the pad attached to the main body of the component.

1 10. The electronic package of claim 9 wherein the opening passes through
2 the printed circuit board from the primary side to the secondary side.

1 11. The electronic package of claim 9 wherein the ground plane connection
2 surface circumscribes the opening in the printed circuit board.

1 12. The electronic package of claim 9 wherein the pad on the main body of
2 the component is in a different plane than the secondary side of the printed circuit
3 board.

1 13. The electronic package of claim 9 wherein the component is a portion of
2 a radio antennae.

1 14. The electronic package of claim 9 wherein the pad positioned on the
2 main body of the component is for electrically testing the component.

1 15. An electrical testing device comprising:
2 a first test probe adapted to contact electrical elements in a first plane; and

3 a second test probe, the second test probe further comprising:
4 an element having a surface for contacting a first plane; and
5 a probe having a free end positioned in a second plane.

1 16. The electrical testing device of claim 15 further comprising a fixture
2 having a nest adapted to receive an electrical device having elements to be tested on
3 a first plane and on a second plane.

1 17. The electrical testing device of claim 16 wherein the electrical device is
2 a circuit board.

1 18. A method for testing a device under test comprising:
2 contacting a first pad on the device under test located in a first plane; and
3 contacting a second pad on the device under test in a second plane
4 substantially simultaneously as contacting the first pad.

1 19. The method of claim 18 wherein the first pad and the second pad are
2 contacted from the same side of the device under test.

1 20. The method of claim 18 wherein contacting the second pad of the device
2 under test further comprises passing a probe through a portion of a device under
3 test.

1 21. The method of claim 20 wherein the device under test is a circuit board
2 having an electrical component attached to a primary side of the circuit board and
3 wherein passing a probe through a portion of the device under test includes passing
4 a probe through an opening in the circuit board.